

Product datasheet for **TA336865**

PADI4 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	Immunohistochemistry: 1:200, Immunohistochemistry-Paraffin: 1:400, Western Blot (Negative), ICC/IF (Negative)
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	A synthetic peptide made to an internal portion of the human PAD4 protein (between residues 200-250) [UniProt Q9UM07]
Formulation:	PBS with 30% Glycerol, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Affinity purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	peptidyl arginine deiminase 4
Database Link:	NP_036519 Entrez Gene 18602 Mouse Q9UM07



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Background:

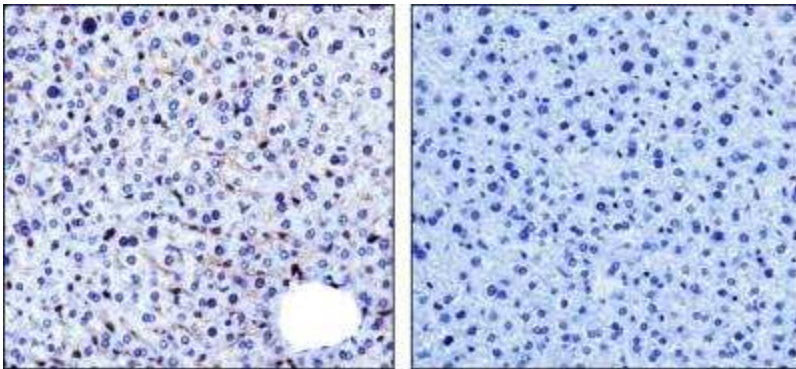
Protein-arginine deiminase type-4 (PAD4) is a member of the protein arginine deiminase family (also known as peptidylarginine deiminase IV, PAD, PDI4, PDI5, and PADI5). Enzymes in the protein arginine deiminase family catalyze the conversion of arginine residues into citrulline residues. More specifically, PAD4 converts arginine residues to citrulline at Arg-8 and Arg-17 on histone H3 and Arg-3 on histone H4, thus preventing methylation at these sites by CARM1 and HRMT1L2/PRMT1. PAD4 also induces a favorable interaction between EP300/P300 and NCOA2/GRIP1 by citrullinating EP300/P300 at Arg-2142. In addition, the PAD4 enzyme may also be involved in the development of granulocytes and macrophages. PAD4 is expressed in the cytoplasmic granules of eosinophils and neutrophils, and is not expressed in peripheral monocytes or lymphocytes. Areas of interest involving PAD4 research include inflammation, immune response, and rheumatoid arthritis.

Synonyms:

PAD; PAD4; PADI5; PDI4; PDI5

Note:

This PAD4 antibody is useful for IHC-paraffin embedded sections where staining was observed in the nucleus and cytoplasm of mouse liver tissue. Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended. This antibody is not recommended for Western Blot or Immunocytochemistry.

Product images:

Immunohistochemistry: PAD4 Antibody TA336865 - PAD4 antibody was tested in mouse liver using DAB with hematoxylin counterstain. The image on the right has been blocked with the immunizing peptide.